

**PROGRAMMER/ANALYST IV***Class Definition*

Under minimal supervision, works closely with departments to determine if work systems are adaptable to computerized data processing: Business Systems, Geographic Information Systems (GIS), and/or the Internet/Intranet Systems; makes recommendations for business process reengineering; develops and/or implements complex computer programs; coordinates installations or other activities with multiple departments and/or other entities.

*Distinguishing Characteristics*

Programmer/Analyst IV is the advanced working/coordinator level class in the Programmer/Analyst series. Incumbents provide professional Information Technology (IT) services through research, analysis, design, development, implementation, training, support, and maintenance, and coordination of these activities with other IT personnel and other departments or external entities. Incumbents work with clients to achieve consensus of problem definitions and solutions. Activities include project management and coordination, process engineering, systems integration, resource requirements determination, and documentation. This class differs from Information Services Manager in that the incumbent of the latter has full supervisory responsibility over Programmer/Analysts. This class differs from Programmer/Analyst III in that the latter is the advanced working/lead class in which incumbents perform a broad range of duties but do not have on-going responsibility for coordinating activities between departments or other entities.

*Typical Tasks*

(This list is neither inclusive nor exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Provides project leadership and direction to assigned staff, departments and/or entities outside the City.

Initiates contact and meets with user departments; analyzes processes, procedures, and programs to determine the feasibility of conversion to electronic processing.

Designs, codes, documents, modifies and tests computer programs in accordance with the City's preestablished standards.

Researches, initiates contact and evaluates vendor software for potential use in the City.

Identifies and initiates information system projects; determines project needs and available resources; and coordinates staff as necessary.

Prepares written procedures for installation of new or revised applications; trains appropriate personnel; assists

in formulating departmental technical standards.

Develops complete operational and program documentation in accordance with the City's preestablished standards.

Develops client interfaces for GIS, Internet, and business systems applications in various programming languages.

Performs special studies for City departments utilizing GIS spatial analysis or other tools.

Develops complex computer applications for the Internet or Intranet.

Oversees the installation of new vendor purchased application software; maintains changes and upgrades to the software; monitors software performance; troubleshoots system problems; and interfaces with the vendor when necessary to expedite implementation of needed fixes/changes.

Communicates orally with end users and prepares written communication through reports, memoranda, and correspondence.

Performs related duties as required.

*Knowledge, Abilities, and Skills*

Knowledge of the principles and methods used to develop GIS, Internet and/or business systems applications.

Knowledge of work stations, personal computers and other peripheral hardware.

Knowledge of programming languages applicable to systems in use in the City of Fresno.

Knowledge of database analysis and design.

Knowledge of the principles and practices of office automation, work flow design, and business process reengineering.

Ability to analyze complex business processes, recognize, evaluate and define problems, and prepare effective recommendations based upon findings.

Ability to develop, implement, document and modify complex computer systems and procedures in accordance with City standards.

Ability to develop and implement complex telecommunication systems and procedures for medium to large computer systems.

Ability to prepare clear, concise, and comprehensive records, reports, correspondence, and other written materials.

Ability to make clear and persuasive oral presentations.

Ability to train and provide lead direction to staff, other departments or staff of other entities outside the City of Fresno.

Ability to establish and maintain effective working relationships with others in the performance of assigned duties.

*Minimum Qualifications*

Two years of experience equivalent to that of a Programmer/Analyst III with the City of Fresno; **OR** graduation from an accredited college or university with a Bachelor's degree with major course work in computer applications and systems, decision science, information management, industrial technology, geography, planning, civil engineering or related field, and five years of experience which included the preparation of business, Internet or GIS programming and analysis.

*Necessary Special Requirements*

Possession of a valid California Drivers License may be required at time of appointment.

Recruitment may be limited to a specific area of expertise as required by operational needs. The specific areas of expertise are listed below:

1. Business Application Systems
2. Geographic Information Systems
3. Internet/Intranet

APPROVED: \_\_\_\_\_

Director

DATE: \_\_\_\_\_